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10/750,279

12/31/2003

Pak-Lung Seto

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08/11/2006

Grossman, Tucker, Perreault & Pfleger, PLLC
c/o PortfolioIP
P.O. Box 52050
Minneapolis, MN 55402

EXAMINER

SHIN, CHRISTOPHER B

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

10/750,279

Applicant(s)

SETO, PAK-LUNG

Examiner

Christopher B. Shin

Art Unit

2181

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 433). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The amendment received May 5th 2006 has been entered and carefully considered. Claims 1-21 are pending in the application.

Response to Arguments

2. Applicant's arguments filed May 5th 2006 have been fully considered but they are not persuasive.
 - a. On page 7, the applicant argued the usage of the "obvious" is improper on the 102 art rejection. The examiner will delete the word "obvious" to avoid confusion; however, the examiner did not intent to use the word "obvious" as in an obviousness rejection. The above deletion does not change or thrust of the rejection.
 - b. On pages 8-10 (102 rejection arguments), the examiner traverses arguments regarding the applicant's basic interpretations of the claimed limitation. The examiner's interpretation is broader than the applicant's interpretation; the examiner gives a broadest possible reasonable interpretation. If the applicant wants to change the examiner's interpretation, the applicant should amend the claims, rather than argue. The claimed "selectable communication control" clearly reads on the functional teachings of (240 & 217) of Elliott reference. Cleary, Ellicott (27) teaches the claimed selective

communication using (217); the initiators selectively communicate with storage devise (see, the background, also [0013]).

c. On page 10, the applicant argued that the Elliott reference does not teach the limitations "allocating bandwidth" & "selectable communication control". The examiner disagrees. This is because; the above limitations are basic necessary part of the functional operation of Elliott reference. Clearly, one skilled in the artisan knows that the bandwidth is allocated and that the communication is selectively controlled in the routing controller.

d. On page 11, the above responses to arguments are similarly applied.

e. For the above reasons, the examiner maintains the art rejection as follows.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 9 & 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliott et al. (US 2005/0066100 A1).

f. In figures 1-3 and the respective descriptive sections, the Elliott reference teaches all of the basic limitations of the claims as follows:

Claims 1-3 Elliott et al.

- An apparatus comprising
 - Expanders in Figure 1B
- A plurality of ports capable of being coupled to a plurality of devices via an associated plurality of command links
 - PHYs of figure 2A
- The links being compliant with SAS protocol
 - Feature of figures 1B-2A
- Circuitry to provide selectable communication control between at least a first device and at least a second device of said plurality of devices
 - 217 & 240
- Selectable communication control comprises restricting access between at least said first device and at least said second device
 - Feature of 217 & 240 where selective connections for communication are made
- Zone
 - Feature of STORAGE TREE & other devices connected to PHYs
- Said circuitry is capable of designating at least one zone
 - Feature of STORAGE TREE 1-5
- Said zone comprising a third device and fourth device, when wherein said selectable communication control comprises restricting access of said least said first device and at least said second device
 - Feature of STORAGE TREE & other devices connected to PHYs
- Said selectable communication control comprises allocating bandwidth of at least one selected path between at least said first device and at least said second device
 - Feature of inherent bandwidth carried by each PHY

Claims 9 & 18 Elliott et al.

- Zone
 - Feature of STORAGE TREE & other devices connected to PHYs
- Designating a zone, said zone comprising at least a first device of a plurality of devices
 - Feature of STORAGE TREE & other devices connected to PHYs

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- Controlling communication between at least one other of said plurality of devices and said first device
 - Feature of 217 & 240 where selective connections for communication are made
- said first device and said other device being capable of communicating in accordance with a SAS protocol
 - Feature of figures 1B-2A
- Wherein said other device is capable of reading data from said first device
 - Feature of 217 & 240 where selective connections for communication are made
- wherein said other device is capable of reading data from said first device
 - Feature of 217 & 240 where selective connections for communication are made

Since the Elliott reference teaches all of the limitations of the claims, the claimed invention would have been anticipated by the teachings of the Elliott reference.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 & 10-12 & 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al (US 2005/0066100 A1)

g. As for claim 4, the teachings of the above claims 1-3 are similarly applied. In addition, the difference between the claim 4 and the Elliott reference is that the Elliott does not expressly disclose the limitations regarding allocating bandwidth; however, such limitation is inherent characteristics of Elliott's system. This is

because the Elliott system clearly utilizes and shares communication bandwidth between subsystems of the system. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the Elliott's system.

h. As for claims 10-12, the limitations regarding restricting access is an well known commonly utilized functions of any multiple device communication system such as the Elliott system.

7. Claims 5-8 & 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al (US 2005/0066100 A1) in view of Beckett et al (US 2005/0149793 A1).

i. As for claims 5-8, the teachings of the claims 1-4 are similarly applied. In addition, the claimed invention does not expressly disclose the limitations regarding the circuit card & a bus; such limitations are clearly taught by Beckett reference. The Beckett reference teaches the background environment that is substantially identical to the claimed invention; furthermore, the Beckett reference teaches the same motivation of expanding bus system (e.g., 28 & 48). Similarly the Elliott's system teaches the same motivation of expanding bus system (e.g., 400) for the same motivation and purpose, as also claimed in the present invention. Therefore, one skilled in the art can easily recognize the same motivation of expanding bus system and come combine or add the detailed expansion structure & function of the Elliott to the Beckett for the well known benefit of system expansion.

j. As for claims 13-17, the teachings of claims 1-4 & 10-12 are similarly applied. However, it is noted that the claimed invention further adds limitations regarding first and second communication protocols; such limitations are commonly motivated and commonly known in the art. As can be seen from one of the cited references Galloway (US2004/0205259 A1) background of invention [0006], the Galloway explains the commonly known characteristics and SAS & SATA in the same expander environment. Therefore, it would have been obvious at the time the invention was made to one skilled in the art to easily come up with or motivated to come up with the claimed invention, since the added limitations are commonly known and recognized in the art. The examiner takes official notice on such well-known knowledge about the SAS & SATA in the expander environment.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher B. Shin whose telephone number is 571-272-4159. The examiner can normally be reached on 6:30-5:00 M,Tu,Th,F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on 571-272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Shin
Primary Examiner
Of 2181



July 16, 2006
cbs